

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent application:

Atty. Ref.: 2590-30

BEVILACQUA et al.

Group Unit: 2877

Serial No.: 09/806,831

Examiner: K. Kianni

Filed: April 5, 2001

For: METHOD AND APPARATUS FOR MEASURING
LOCALLY AND SUPERFICIALLY THE SCATTERING
AND ABSORPTION PROPERTIES OF TURBID MEDIA

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November 5, 2003

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DISCUSSION POINTS FOR INTERVIEW

Sir:

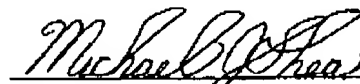
Applicants submit the following discussion points for a personal interview with Examiner Kianni in connection with the subject patent application.

(1) The parameter $\gamma = (1 - g_2)/(1 - g_1)$ described in the subject patent application and specified in claim 1 is a new concept and is not related to g and g' appearing in equation 13 of Wu *et al.*: $k(g')/k(g) = 1 - g'/1 - g$. Specifically, g and g' are both first order moments, whereas g_1 and g_2 are respectively the first and second order moments of the development of the phase function $p(\theta)$ in Legendre polynomials. Consequently, the parameter γ and equation 13 of Wu *et al.* are quite different. Indeed, Wu *et al.* does not mention the second order moment of the phase function. The approach of the subject application is fundamentally different and cannot be derived from Wu *et al.*'s approach.

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(2) The subject patent application discloses a system and method for determining optical characteristics such as the absorption coefficient μ_a , the reduced scattering coefficient μ_s , and a parameter γ from the spatially resolved reflectance $R(\rho)$. This determination involves, among other things, the dependence of the diffuse reflectance R on the distance ρ separating the source of illumination and the optical detector. This dependence of R on ρ does not at all appear in Wu *et al.* The diffuse reflectance $R(\mu_a, \mu_s, g)$ of Wu *et al.* is a value of the reflectance integrated over space and does not contain any information on its dependence on the source-detector distance ρ . Although the office action of 5/20/03 refers to the "z" described in column 8 of Wu *et al.* as the "source-detector distance," "z" actually refers to tissue depth. See, e.g., col. 8, line 9-11.

Respectfully submitted,
NIXON & VANDERHYE P.C.



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FACSIMILE COVER SHEET
PLEASE DELIVER IMMEDIATELY!!!!

Our Ref.: 2590-30

Your Ref.: 09/806,831

Date: November 5, 2003

To: Examiner Kaveh C. Kianni – Group Art Unit 2877

Firm: U.S. Patent and Trademark Office

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From: Michael J. Shea

Number of Pages (including cover sheet): 4

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Debbie Phelps
FACSIMILE OPERATOR

ATTACHMENT/S: Discussion Points for Interview

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PTOL-413A (08-03)

Approved for use through 07/31/2006. OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE**Applicant Initiated Interview Request Form**

Application No.: 09/ 806,831 First Named Applicant: BEVILACQUA
 Examiner: K. Kianni Art Unit: 2877 Status of Application: After final

Tentative Participants:

(1) Michael Shea (2) Examiner Kaveh Kianni
 (3) _____ (4) _____

Proposed Date of Interview: week of 11/3/03 Proposed Time: AM (AM/PM)

Type of Interview Requested:

(1) ☐ Telephonic (2) ☒ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☒ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Continuation Sheet Attached

Brief Description of Arguments to be Presented:

See attached Discussion Points for Interview

An interview was conducted on the above-identified application on _____.

NOTE:

This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Michael B. Shea
 (Applicant/Applicant's Representative Signature)

 (Examiner/SPE Signature)

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.